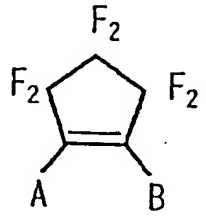
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

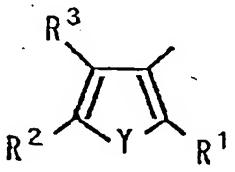
Listing of Claims

1. (currently amended) A photochromic material comprising a compound having a ring opening quantum yield of 10^{-3} or lower, belonging to ~~the~~ diheteroarylethene class, represented by the following general formula [I]:

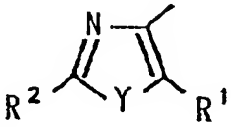


... [I]

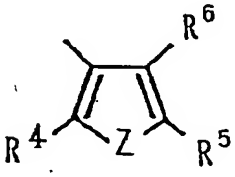
wherein, in the general formula [I], A represents ~~the~~ following substituents [i] or [ii], and B represents ~~the~~ following substituents [iii] or [iv];



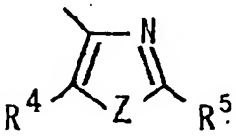
...[i]



...[ii]



...[iii]



...[iv]

wherein, in the substituents [i] and [ii], R^1 represents an alkoxy group, R^2 represents -Q-Ar, Q representing a direct bond or an arbitrary divalent group and Ar representing an aromatic

hydrocarbon ring or an aromatic heterocycle which are optionally substituted, R^3 represents a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a fluoroalkyl group, a cyano group, or an aryl group which is optionally substituted, and Y represents -O- or -S-; and

in the substituents [iii] and [iv], R^4 represents an alkoxy group, R^5 represents -Q-Ar, Q representing a direct bond or an arbitrary divalent group and Ar representing an aromatic hydrocarbon ring or an aromatic heterocycle which are optionally substituted, R^6 represents a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a fluoroalkyl group, a cyano group, or an aryl group which is optionally substituted, and Z represents -O- or -S-.

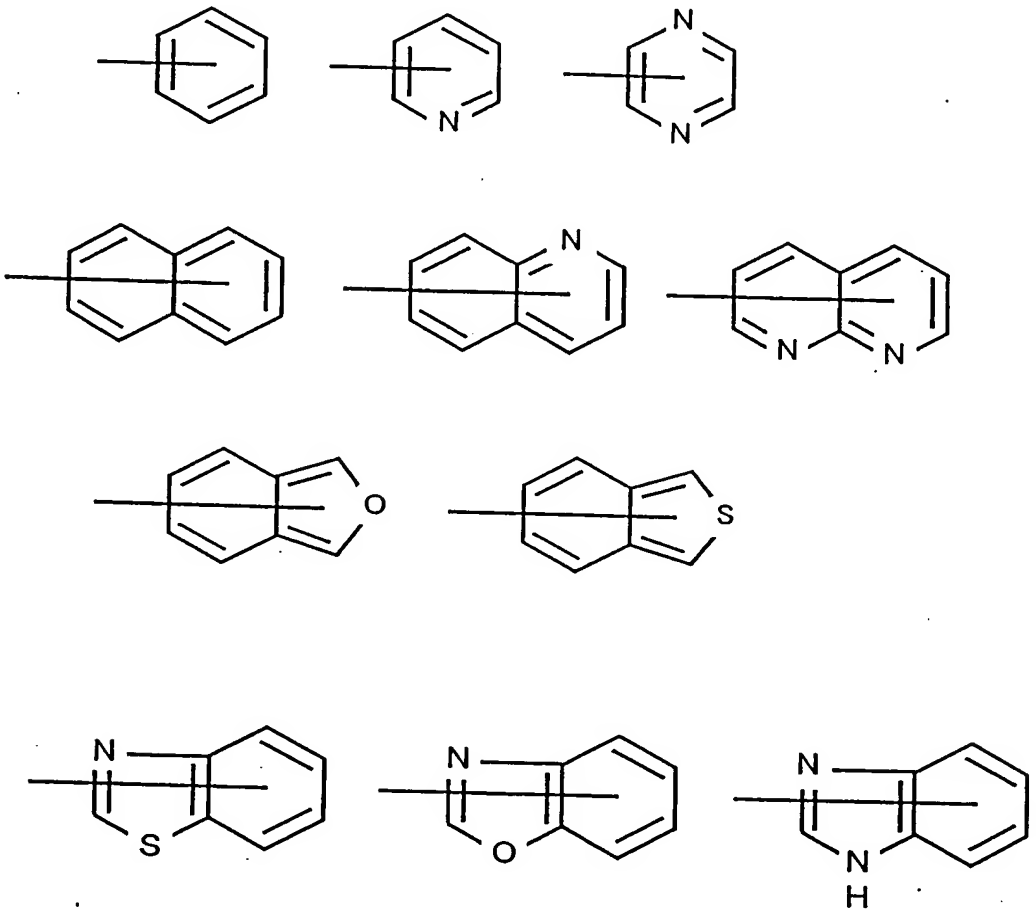
2. (currently amended) A photochromic material as claimed in claim 1, wherein the ring opening quantum yield is ~~10^{-3}~~ 3.3×10^{-4} or lower.

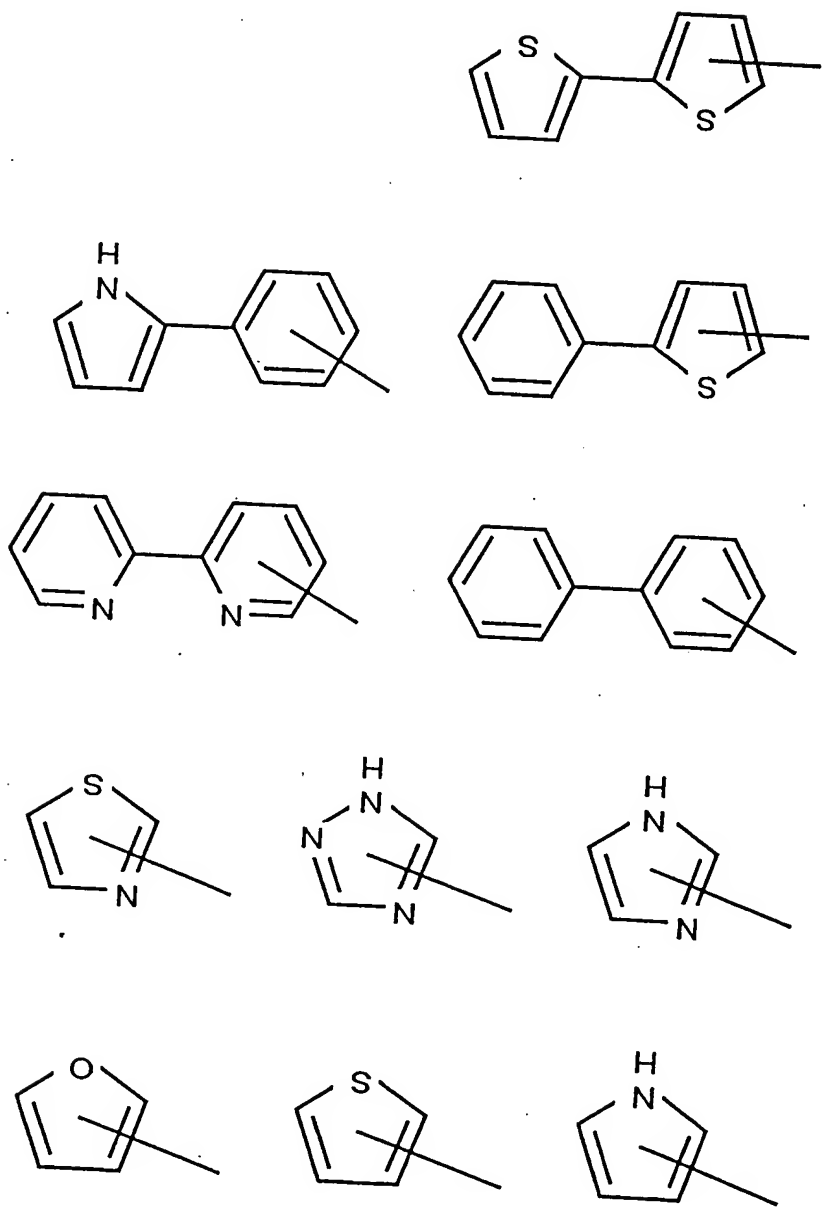
3. (original) A photochromic material as claimed in claim 1, wherein R^1 and R^4 in the substituents [i]-[iv] of said general formula [I] each comprise independently an alkoxy group having 1-3 carbon atoms.

4. (original) A photochromic material as claimed in claim 3, wherein R^1 and R^4 each comprise a methoxy group.

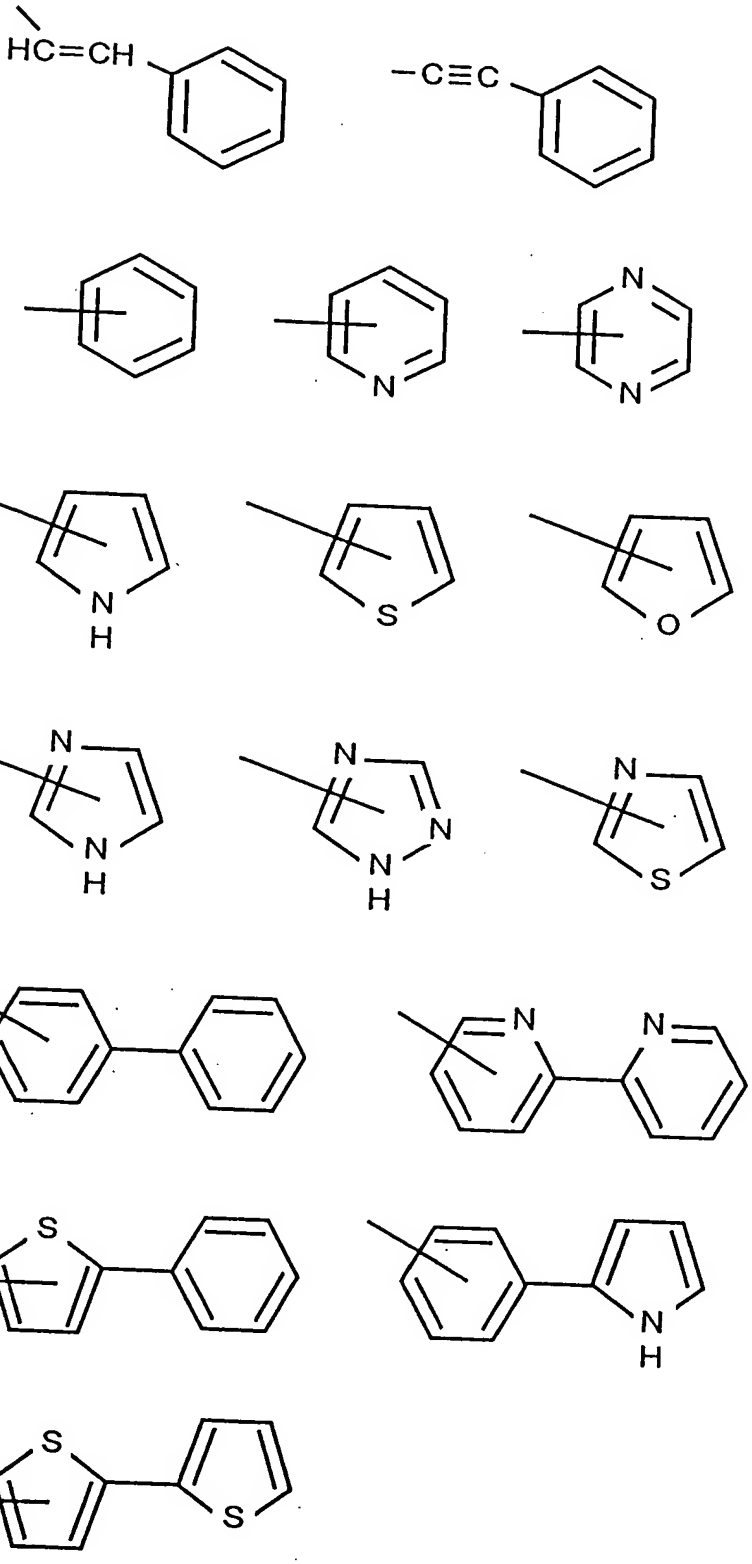
5. (currently amended) A photochromic material described in claim 1 wherein Q in Q-Ar corresponding to R^2 and R^5 in the substituents [i]-[iv] of said general formula [I] each comprise independently a direct bond, -(-CH=CH-)n- ~~(i.e. a polyethylene group)~~ (wherein n = 1-5), or ~~-(-C≡C-)n-~~ -(-C≡C-)n- ~~(i.e. a polyacetylene group)~~ (wherein n = 1-5), whereby Ar comprises a single 5- or 6-member ring, or two or three 5- or 6-member rings directly bonded or condensed, each of said rings being optionally substituted.

6. (original) A photochromic material as claimed in claim 5, wherein Ar in Q-Ar corresponding to R^2 and R^5 is selected independently from the group consisting of the following formulae:





7. (currently amended) A photochromic material as claimed in claim 6, wherein R^2 and R^5 are each selected independently from the group consisting of ~~the~~ following formulae:


HC=CH
−C≡C
N
N
N
N
N
H
S
O
N
N
H
N
N
H
N
S
N
N
S
S
N
H
S
S

8. (previously presented) A photochromic material described in claim 1, wherein R^3 and R^6 each comprise independently a linear alkyl group.

9. (currently amended) A photochromic material described in claim 1, wherein the photochromic material comprises a compound, belonging to the diheteroarylethene class, selected from the group consisting of ~~the~~ following formulae: